

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,330	07/14/2006	Yorio Takahashi	008509-07107	1836
52989 7590 093/12999 Dickinson Wright PLLC James E. Ledbetter, Esq. International Square 1875 Eye Street, N.W., Suite 1200 Washington, DC 20006			EXAMINER	
			SHEN, KEZHEN	
			ART UNIT	PAPER NUMBER
			2627	
			MAIL DATE	DELIVERY MODE
			03/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/586 330 TAKAHASHI, YORIO

	10/000,000	1740 4 17 10 111, 1 0 1	
Office Action Summary	Examiner	Art Unit	
	Kezhen Shen	2627	
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence ad	dress
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MALLING D.  Extensions of time may be available under the provisions of 37 CFR 1.1 after SN, 60 MONTHS from the maining date of the communication.  If NO period for reply is specified above, the maximum statutory period v. Failure to reply within the set or estended period rest specified you will be a set of the state of the	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	I. sely filed the mailing date of this or (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 14 Ju	<u>ıly 2006</u> .		
2a) This action is FINAL. 2b) ☐ This	action is non-final.		
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the	merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-34 is/are pending in the application.			
4a) Of the above claim(s) is/are withdray			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-34</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examine	r		
10) The drawing(s) filed on is/are: a) according to the drawing and according to the drawing are as a cordinate and according to the drawing are as a cordinate are a		- - - - - - -	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct			R 1 121(d)
11) The oath or declaration is objected to by the Ex			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).	
1.⊠ Certified copies of the priority document	s have been received		
Certified copies of the priority documents		on No	
Copies of the certified copies of the prior			Stane
application from the International Bureau	•	a in this rational	olugo
* See the attached detailed Office action for a list		d.	
Attachment(s)			
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	(PTO-413) ite	

4) ☐ Interview Summary (PTO-413) Paper No(s)Mail Date. 5) ☐ Notice of Informal Patent AFF lication 6) ☐ Other:	
	Paper No(s)/Mail Date  5) Notice of Informal Patent Application

Art Unit: 2627

## DETAILED ACTION

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 13-19, 21-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dziekan et al. US 6,282,608 B1 and Komma et al. US 6,714,498 B2.

Regarding claim 1, Dziekan et al. teach a removable medium recording/reproduction device having a removable medium loading/ejection mechanism which operates according to a change in state of switches each provided on an outer portion or on an inner portion of the device or according to a command from the outside of the device to transport a removable medium into the device (Col 1 Lines 32—35, Col 2 Lines 29-56 security switch) and to set the removable medium in a reproducible state or to transport and expel the removable medium out of the device (Col 2 Lines 10-56 "on" or "off" security state), the device comprising: a medium expelling prohibition information detector (12 of Fig. 1, Col 2 Lines 22-43 CPU) which detects medium expelling prohibition information (Col 2 Lines 10-56) and a controller (12 of Fig. 1, Col 2 Lines 22-43 CPU) which, does not perform expelling of the medium due to a change in state of the switches or a command from the outside of the device (Fig. 2b, Col 2 Lines 44-56 "off" state), and which operates the removable medium loading/ejection mechanism to expel the medium (Fig. 2b, Col 2 Lines 44-56 "on" state) according to the

Art Unit: 2627

change in state of the switches or the command from the outside of the device (Fig. 2b, Col 2 Lines 44-56). Dezikan et al. fail to teach medium expelling prohibition information is recorded in a predetermined area on a removable medium.

However, Komma et al. teach this limitation. Komma et al. teach medium expelling prohibition information recorded in a predetermined area on a removable medium (31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of recording expelling prohibition information on a predetermined area on a removable medium as taught by Komma et al. as a whole to include medium expelling prohibition information on the recording medium for the benefit of protecting copyrights (Komma et al. Col 4 Lines 49-58).

Regarding claim 2, Dziekan et al. teach a removable medium recording/reproduction device having a removable medium loading/ejection mechanism which operates according to a change in state of switches each provided on an outer portion or on an inner portion of the device or according to a command from the outside of the device to transport a removable medium into the device (Col 1 Lines 32—35, Col 2 Lines 29-56 security switch) and to set the removable medium in a reproducible state or to transport and expel the removable medium out of the device (Col 2 Lines 10-56 "on" or "off" security state), the device comprising: a medium expelling prohibition information detector (12 of Fig. 1, Col 2 Lines 22-43 CPU) which detects medium

Art Unit: 2627

expelling prohibition information (Col 2 Lines 10-56) and a controller (12 of Fig. 1, Col 2 Lines 22-43 CPU) which, does not perform expelling of the medium due to a change in state of the switches or a command from the outside of the device (Fig. 2b, Col 2 Lines 44-56 "off" state). Dziekan et al. fail to teach medium expelling prohibition information is recorded in a predetermined area on a removable medium, a removable medium detector which detects whether or not a removable medium is in the device, and which, if the existence of a removable medium in the device is detected by the removable medium detector, and if no record of medium expelling prohibition information on the removable medium is detected by the medium expelling prohibition information detector, operates the removable medium loading/ejection mechanism to expel the medium according to the change in state of the switches or the command from the outside of the device.

However, Komma et al. teach these limitations. Komma et al. teach medium expelling prohibition information recorded in a predetermined area on a removable medium (31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk), a removable medium detector which detects whether or not a removable medium is in the device (Variation 1 of Fig 4, Col 3 Line 62 – Col 4 Line 25, if it is not a recordable disk) and which, if the existence of a removable medium in the device is detected by the removable medium detector, and if no record of medium expelling prohibition information on the removable medium is detected by the medium expelling prohibition information detector, operates the removable medium loading/ejection mechanism to expel the medium according to the change in state of the switches or the command

Art Unit: 2627

from the outside of the device (Col 5 Line 60-Col 6 Line 59 a disk has been detected and a predetermined information is not found the disk). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of recording expelling prohibition information on a predetermined area on a removable medium, a removable medium detector which detects whether or not a removable medium is in the device, and which, if the existence of a removable medium in the device is detected by the removable medium detector, and if no record of medium expelling prohibition information on the removable medium is detected by the medium expelling prohibition information detector, operates the removable medium loading/ejection mechanism to expel the medium according to the change in state of the switches or the command from the outside of the device as taught by Komma et al. as a whole to include medium expelling prohibition information on the recording medium for the benefit of protecting copyrights (Komma et al. Col 4 Lines 49-58, Col 6 Lines 54-59).

Regarding claim 3, Dziekan et al. fail to teach the removable medium recording/reproduction device according to claim 1, wherein the removable medium loading/ejection mechanism cannot forcibly expel the removable medium during power-down of the device.

However, Komma et al. teach this limitation. Komma et al. teach a recording/reproduction device which cannot forcibly expel the removable medium during power-down of the device (Fig. 1, Col 2 Line 57 – Col 3 Line, as seen from Fig. 1 the

Art Unit: 2627

optical disk apparatus has no way of ejecting manually or forcibly expelling the removable medium during the power-down state). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of a lack of a manual ejection switch for the recording/reproduction device as taught by Komma et al. as a whole to not include a manual ejection switch on the recording/reproduction device for the benefit of protecting the disk from being ejected during the power-down state.

Regarding claim 4, Dziekan et al. teach the removable medium recording/reproduction device according to claim 1, wherein the controller expels the medium according to the change in state of all the switches (Col 1 Lines 32—35, Col 2 Lines 29-56 security switch) or the command from the outside of the device in the time period from reception of a medium expelling prohibition cancellation command from the outside of the device to detection of medium expelling prohibition information in the predetermined area on the removable medium performed by the medium expelling prohibition information detector upon reinsertion of the removable medium into the device.

Regarding claim 5, Dziekan et al. fail to teach the removable medium recording/reproduction device according to claim 4, wherein the medium expelling prohibition information includes a medium expelling prohibition cancellation code, and the controller accepts the medium expelling prohibition cancellation command as a valid

Art Unit: 2627

command only if the medium expelling prohibition cancellation command includes the medium expelling prohibition cancellation code or data obtained by converting the medium expelling prohibition cancellation code by a certain rule.

However, Komma et al. teach this limitation. Komma et al. teach a recording/reproduction device which includes a medium expelling prohibition cancellation code and the controller accepts the medium expelling prohibition cancellation command or data obtained by converting the medium expelling prohibition cancellation code by a certain rule (31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk indicates an allowance or rejection for ejection). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of recording/reproduction device which includes a medium expelling prohibition cancellation code and the controller accepts the medium expelling prohibition cancellation command or data obtained by converting the medium expelling prohibition cancellation code by a certain rule as taught by Komma et al. as a whole to include cancellation code on the medium for the benefit of protecting copyrights (Komma et al. Col 4 Lines 49-58. Col 6 Lines 54-59).

Regarding claim 6, Dziekan et al. teach a removable medium loading/ejection mechanism which operates according to a change in state of switches each provided on an outer portion or on an inner portion of the device or according to a command from the outside of the device to transport a removable medium into the device (Col 1 Lines

Art Unit: 2627

32-35, Col 2 Lines 29-56 security switch) and to set the removable medium in a reproducible state or to transport and expel the removable medium out of the device (Col 2 Lines 10-56 "on" or "off" security state), the device comprising: a nonvolatile storage which is capable of holding storage contents even after power supply for the removable medium recording/reproduction device has been shut off, and which is rewritable (Col 2 Lines 36-43 memory flag); and a controller which records a medium expelling prohibition flag in the nonvolatile storage (Col 2 Lines 36-43 CPU), which, if the medium expelling prohibition flag is recorded in the nonvolatile storage, does not perform expelling of the medium due to a change in state of the switches or a command from the outside of the device (Col 2 Lines 36-43 memory flag indicates the status of the security state), and which, if the medium expelling prohibition flag is not recorded in the nonvolatile storage, operates the removable medium loading/ejection mechanism to expel the medium according to the change in state of the switches or the command from the outside of the device (Figs. 2a and 2b, Col 2 Lines 36-43, memory flag is recorded and checked then the vehicle ignition switch is checked). Dezikan et al. fail to teach a medium expelling prohibition information detector which detects whether or not medium expelling prohibition information is recorded in a predetermined area on a removable medium and when the medium expelling prohibition information detector detects a record of medium expelling prohibition information a medium expelling prohibition flag is recorded.

However, Komma et al. teach this limitation. Komma et al. a medium expelling prohibition information detector which detects whether or not medium expelling

Art Unit: 2627

prohibition information is recorded in a predetermined area on a removable medium (Col 4 Lines 36-43) and when the medium expelling prohibition information detector detects a record of medium expelling prohibition information a medium expelling prohibition flag is recorded (Col 4 Lines 27-35 and 46-48). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of a medium expelling prohibition information detector which detects whether or not medium expelling prohibition information is recorded in a predetermined area on a removable medium and when the medium expelling prohibition information detector detects a record of medium expelling prohibition information a medium expelling prohibition flag is recorded as taught by Komma et al. as a whole to include a medium expelling prohibition information detector and an nonvolatile memory to store the results of the detection for the benefit of protecting copyrights (Komma et al. Col 4 Lines 49-58).

Regarding claim 7, Dziekan et al. fail to teach the removable medium loading/ejection mechanism cannot forcibly expel the removable medium during power-down of the device.

However, Komma et al. teach this limitation. Komma et al. teach a removable medium loading/ejection mechanism cannot forcibly expel the removable medium during power-down of the device (Fig. 1, Col 2 Line 57 – Col 3 Line, as seen from Fig. 1 the optical disk apparatus has no way of ejecting manually or forcibly expelling the

Art Unit: 2627

removable medium during the power-down state). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of a lack of a manual ejection switch for the removable medium loading/ejection mechanism as taught by Komma et al. as a whole to not include a manual ejection switch on the recording/reproduction device for the benefit of protecting the disk from being ejected during the power-down state.

Regarding claim 8, Dziekan et al. teach the removable medium recording/reproduction device according to claim 6, wherein the controller clears the medium expelling prohibition flag in the nonvolatile storage when the medium expelling prohibition cancellation command from the outside of the device is received (Figs. 2a and 2b, Col 2 Lines 29-56, the ignition switch is detected first then the security state is changed).

Regarding claim 9, Dziekan et al. fail to teach the removable medium recording/reproduction device according to claim 8, wherein the medium expelling prohibition information includes a medium expelling prohibition cancellation code, and the controller accepts the medium expelling prohibition cancellation command as a valid command only if the medium expelling prohibition cancellation command includes the medium expelling prohibition cancellation code or data obtained by converting the medium expelling prohibition cancellation code by a certain rule.

Art Unit: 2627

However, Komma et al. teach this limitation. Komma et al. teach a recording/reproduction device which includes a medium expelling prohibition cancellation code and the controller accepts the medium expelling prohibition cancellation command or data obtained by converting the medium expelling prohibition cancellation code by a certain rule (31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk indicates an allowance or rejection for ejection). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of recording/reproduction device which includes a medium expelling prohibition cancellation code and the controller accepts the medium expelling prohibition cancellation command or data obtained by converting the medium expelling prohibition cancellation code by a certain rule as taught by Komma et al. as a whole to include cancellation code on the medium for the benefit of protecting copyrights (Komma et al. Col 4 Lines 49-58, Col 6 Lines 54-59).

Regarding claim 13, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 1.

Regarding claim 14, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 2.

Regarding claim 15, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 4.

Art Unit: 2627

Regarding claim 16, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 5.

Regarding claim 17, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 6.

Regarding claim18, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 8.

Regarding claim 19, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 9.

Regarding claim 21, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 1. Further, Komma et al. teach an input device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 22, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 2. Further, Komma et al. teach an input device

Art Unit: 2627

for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 23, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 4. Further, Komma et al. teach an input device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 24, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 5. Further, Komma et al. teach an input device

Art Unit: 2627

for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 25, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 4. Further, Komma et al. teach an input device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 26, the limitations have been analyzed and rejected with respect to the reasons set forth above in claims 1, 4 and 5. Further, Komma et al. teach an input

Art Unit: 2627

device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35) and to record the medium expelling prohibition information in the predetermined area on the removable medium (Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device and recording the medium expelling prohibition information in the predetermined area on the removable medium as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10) and recording the medium expelling prohibition information in the predetermined area on the removable medium for the benefit of protecting the copyrights of the disk (Komma et al. Col 4 Lines 56-58).

Regarding claim 27, the limitations have been analyzed and rejected with respect to the reasons set forth above in claims 4 and 5. Further, Komma et al. teach to record the medium expelling prohibition information in the predetermined area on the removable medium (Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of recording the medium expelling prohibition information in the predetermined area on the removable medium as

Art Unit: 2627

taught by Komma et al. as a whole to record the medium expelling prohibition information in the predetermined area on the removable medium for the benefit of protecting the copyrights of the disk (Komma et al. Col 4 Lines 56-58).

Regarding claim 28, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 6.

Regarding claim 29, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 8.

Regarding claim 30, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 9.

Regarding claim 31, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 8.

Regarding claim 32, the limitations have been analyzed and rejected with respect to the reasons set forth above in claims 6, 8 and 9. Further, Komma et al. teach an input device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the

Art Unit: 2627

optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10).

Regarding claim 33, the limitations have been analyzed and rejected with respect to the reasons set forth above in claims 1, 4 and 5. Further, Komma et al. teach an input device for enabling a user to operate the controller as desired (24 of Fig. 1, Col 3 Lines 5-10, Col 4 Lines 27-35) and to record the medium expelling prohibition information in the predetermined area on the removable medium (Col 4 Lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. with the teachings of including an input device and recording the medium expelling prohibition information in the predetermined area on the removable medium as taught by Komma et al. as a whole to include an input device on the recording/reproduction device for the benefit of exchanging various information from an external unit to the optical disk apparatus by means of the signal input/output part (Komma et al. 24 of Fig. 1, Col 3 Lines 5-10) and recording the medium expelling prohibition information in the predetermined area on the removable medium for the benefit of protecting the copyrights of the disk (Komma et al. Col 4 Lines 56-58).

Regarding claim 34, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 10.

Art Unit: 2627

Claims 10, 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dziekan et al. US 6,282,608 B1 and Komma et al. US 6,714,498 B2 and further in view of Howarth US 6,549,490 B1.

Regarding claim 10, Komma et al. teach the removable medium recording/reproduction device according to claim 1, wherein the removable medium loading/ejection mechanism has: to set the forced expelling mechanism in the operable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is not recorded (Komma et al. 31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk indicates an allowance or rejection for ejection). However, both Dziekan et al. and Komma et al. fail to teach a forced expelling mechanism capable of forcibly expelling the medium during power-down of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state and wherein the controller operates to set the forced expelling mechanism in the inoperable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is recorded.

However, Howarth teaches these limitations. Howarth teaches each a forced expelling mechanism capable of forcibly expelling the medium during power-down of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state (Fig. 4, Col 5 Lines 24-42, disabling system and switch) and wherein the controller operates to set the forced expelling mechanism in the inoperable state by controlling the forced

Art Unit: 2627

expelling mechanism changer if the medium expelling prohibition information is recorded (Fig. 4, Col 5 Lines 24-42, CPU). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. and Komma et al. with the teachings of a forced expelling mechanism capable of forcibly expelling the medium during powerdown of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state and wherein the controller operates to set the forced expelling mechanism in the inoperable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is recorded as taught by Komma et al. as a whole to include a mechanical ejection system with an inoperable and operable state controlled by the expelling prohibition information recorded on the medium for the benefit of preventing unauthorized users from opening the external drive components (Howarth Col 2 Lines 33-40).

Regarding claim 12, Komma et al. teach the removable medium recording/reproduction device according to claim 10, wherein the removable medium loading/ejection mechanism has: to set the forced expelling mechanism in the operable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is not recorded (Komma et al. 31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk indicates an allowance or rejection for ejection). However Komma et al. fail to teach wherein the forced expelling mechanism changer of

Art Unit: 2627

the removable medium loading/ejection mechanism is arranged to selectively change the forced expelling lever between a positions at which the medium can be forcibly expelled by manually expelling the medium by inserting the pin into the hole.

Howarth teaches each a forced expelling mechanism capable of forcibly expelling the medium during power-down of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state (Fig. 4, Col 5 Lines 24-42, disabling system and switch) and wherein the controller operates to set the forced expelling mechanism in the inoperable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is recorded (Fig. 4, Col 5 Lines 24-42, CPU). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al. and Komma et al. with the teachings of a forced expelling mechanism capable of forcibly expelling the medium during power-down of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state and wherein the controller operates to set the forced expelling mechanism in the inoperable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is recorded as taught by Komma et al. as a whole to include a mechanical ejection system with an inoperable and operable state controlled by the expelling prohibition information recorded on the medium for the benefit of preventing

Art Unit: 2627

unauthorized users from opening the external drive components (Howarth Col 2 Lines 33-40). Further, one of ordinary skill in the arts would found the method of the inserting a pin into a hole to forcibly expel a medium in the recording/reproduction device based on the expelling mechanism changer to be inherent as taught by Howarth. It would be impossible to manually eject the tray using the pin hole if the gears used to eject the tray are locked. Therefore, this limitation is also rejected with respect to Howarth.

Regarding claim 20, the limitations have been analyzed and rejected with respect to the reasons set forth above in claim 10.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dziekan et al. US 6,282,608 B1, Komma et al. US 6,714,498 B2 and Howarth US 6,549,490 B1. and further in view of Hisaharu JP 07-078396.

Regarding claim 11, Komma et al. teach the removable medium recording/reproduction device according to claim 10, wherein the removable medium loading/ejection mechanism has: to set the forced expelling mechanism in the operable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is not recorded (Komma et al. 31 of Fig. 3, Fig. 4, Col 4 Lines 26-58, recorded history on the optical disk indicates an allowance or rejection for ejection) and Howarth teaches each a forced expelling mechanism capable of forcibly expelling the medium during power-down of the device; and a forced expelling mechanism changer which mechanically changes the forced expelling mechanism between an inoperable state and an operable state (Fig. 4, Col 5 Lines 24-42, disabling system and switch) and wherein the controller operates to set the forced expelling mechanism in the

Art Unit: 2627

inoperable state by controlling the forced expelling mechanism changer if the medium expelling prohibition information is recorded (Fig. 4, Col 5 Lines 24-42, CPU). However, both Komma et al. and Howarth fail to teach the inoperable and operable state is applied by opening and closing the hole provided in the front surface of the device.

However, Hisaharu teach this. Hisaharu teach the inoperable and operable state is applied by opening and closing the hole provided in the front surface of the device. (drawing 1, 2 and 5, [0020] – [0026]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of a recording/reproduction device having a loading/ejection mechanism which operates according to a change in state of switches as taught by Dziekan et al., Komma et al. and Howarth with the teachings of the inoperable and operable state function as applied by opening and closing the hole provided in the front surface of the device as taught by Hisaharu as a whole to include the inoperable and operable state function by opening and closing the hole provided in the front surface of the device for the benefit of preventing unauthorized users from manually ejecting the disc.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kezhen Shen whose telephone number is (571) 270-1815. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/586,330 Page 23

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kezhen Shen/ Examiner, Art Unit 2627 /Joseph H. Feild/ Supervisory Patent Examiner, Art Unit 2627